CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 80-40

WASTE DISCHARGE REQUIREMENTS

MARIN MUNICIPAL WATER DISTRICT
KENT LAKE PROJECT
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board) finds that:

1. The Marin Municipal Water District (hereinafter the disharger) operates Kent Lake on Lagunitas Creek, Marin County, as a municipal water supply reservoir with a current capacity of 16,700 acre-feet.

2. The discharger proposes to raise the existing Peters Dam that confines Kent Lake approximately 45 feet for the purpose of increasing the storage capacity to 32,900 acre-feet. Peters Dam is located in NW1/4 of Section 25, T.2N, R.8W, on Lagunitas Creek, a tributary to Tomales Bay, waters of the State.

3. Lagunitas Creek is a valuable freshwater habitat due to its rich aquatic life, including the presence of a rare and endangered shrimp and its continued ability to support a significant spawning run for both steelhead and silver salmon.

4. The Water Quality control Plan for the San Francisco Bay Basin (Basin Plan), adopted in April 1975 by the Regional Board, identified the following beneficial uses of Lagunitas Creek:

   a. Fish migration and spawning
   b. Preservation of rare and endangered species
   c. Wildlife habitat
   d. Cold freshwater habitat
   e. Contact and non-contact water recreation

5. The Basin Plan states that waters of the State shall not be altered in such a manner as to cause turbidity, color, sediment, and suspended material to be in concentrations that cause nuisance or adversely affect beneficial uses.

6. Marin Municipal Water District certified a Final Environmental Impact Report (EIR) for this project in accordance with the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.). The EIR identified the following significant water quality impacts as likely to occur as a result of the Kent Lake project:

   a. Downstream siltation in Lagunitas Creek
   b. Decreased flows and bedload sediment transport capacity in Lagunitas Creek and loss of riparian habitat affecting aquatic life, especially salmon and steelhead.

7. Changes or operational conditions which mitigate or avoid the affects described in Finding 6, item b are within the jurisdiction of other public agencies, including the Water Rights Division of the State Water Resources Control Board. Such changes or conditions can and should be adopted by such other agencies.

8. The problems associated with increased erosion and sediment potential have been addressed to a limited extent by the dischargers and California Department of Fish and Game as follows:

   a. The discharger adopted mitigation measures in Resolution 5304 (Kent Lake Project Approval, dated June 13, 1979) to mitigate or avoid significant downstream siltation. These measures include, in part, use of silt retention ponds or dams, pre-rainy season reseeding of site, minimal vegetation removal and prohibition of heavy equipment in the stream bed.

   b. The California Department of Fish & Game issued Streambed Alteration Agreements (III-1068-79, September 28, 1979; III-1268-79, December 27, 1979; and III-253-80, April 10, 1980) to the discharger requiring the installation and maintenance of a gabian silt retention dam in Lagunitas Creek, installation of proper road drainage structures, winterization of the site prior to December 1, 1980 and other erosion control measures necessary to control siltation of Lagunitas Creek.

   The erosion and sedimentation potential of this project is great and will be mitigated by the discharger's compliance with limitations and provisions of this Order.

9. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the Kent Lake project and provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

10. The Board, in a public hearing, heard and considered all comments pertaining to this potential discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, that the discharger shall comply with the following discharge specifications:

A. Prohibitions

1. The discharge, or creation of potential for discharge of, solid or liquid waste materials, including fresh concrete, cement, soil, silt, clay, sand and other organic and earthen materials to Lagunitas Creek or any tributary thereto is prohibited except as allowed under Section C.

2. Discharge from the construction area shall not cause any bottom deposits, floatable materials, oil or grease to be present in Lagunitas Creek or any tributary thereto in quantities that would unreasonably affect or threaten to affect beneficial uses.

3. Discharge from the construction area shall not contain substances in concentrations individually, collectively, or cumulatively toxic, harmful, or deleterious to humans, animals, birds, or aquatic biota.

4. Discharge from the construction area shall not cause a condition of pollution or nuisance.

B. Construction Drainage and Waste Management Specifications

1. Adequate erosion control and sediment or surface flow containment facilities shall be constructed and maintained to prevent discharge of waste earthen materials from disturbed areas under construction and from completed construction.

2. Earthen berms or other sedimentation barriers shall be located downgradient from construction areas to prevent the discharge of earthen waste material to surface waters or onto adjacent land areas accessible to surface waters via runoff.

3. Drainage and surface flows from construction areas shall be controlled to prevent downstream erosion.

4. The use of equipment in live streams shall be prohibited unless approved by the Executive Officer. Equipment crossings shall be restricted to approved sites provided with culverts, bridges or suitable rock substrate per California Department of Fish and Game code requirements.

5. All surplus and waste materials shall be disposed of in an appropriate manner and location sufficient to prevent erosion and subsequent sedimentation.

6. Wastewater resulting from gravel washing or concrete preparation, and any wastewater developed from foundation sluicing shall be ponded outside the natural stream channel. The pond(s) shall be of sufficient capacity to effect removal of fine materials through settling before water is returned to the stream. To the extent practical, this water should be reused, rather than be allowed to return to the stream.

7. There shall be no disturbance of natural vegetation or soil condition except when erosion control measures can be installed and operational prior to October 15 of each year.

8. All cut and fill slopes and other areas disturbed by construction activities shall be stabilized by appropriate soil stabilization measures sufficient to prevent erosion and subsequent sedimentation. These measures shall include reseeding and/or revegetation, preferably with plants indigenous to the area. A revegetation management program shall be implemented to ensure that all reseeded areas develop root systems sufficient to propogate and maintain cover and prevent erosion.

C. Effluent Limitations

1. The discharge from the subject site shall not contain any perceptible floating material including, but not limited to, soils, liquids, foams, and scums.

2. The discharge from the subject site shall not contain oils, greases, waxes, or other hydrocarbon or petroleum derivitive materials that cause visible film or coating on the surface of the receiving water or on objects in the receiving water.

3. Wastewater returning to the creek below the silt retention basin or from the silt retention basin itself, shall not have a settleable solids concentration in excess of 1.0 ml/l-hr.

4. Turbidity increases, due to past or current construction activities, in excess of 50 units (JTU) shall not be allowed to continue unabated for more than two hours in any 24-hour period, as measured below the silt retention basin and above the confluence with San Geronimo Creek.

D. Receiving Water Limitations

1. The discharge of waste shall not cause the following limits to be exceeded in waters of Lagunitas Creek downstream of the silt retention basin:

   a. Dissolved Oxygen - 7.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, the discharge shall not cause further reduction in the concentration of dissolved oxygen.

   b. pH - Variation from natural ambient pH (as measured in Kent Lake near the release point) by more than 0.5 pH units.

E. Provisions

1. To ensure compliance with this Order the discharger shall submit an erosion-sedimentation control plan to this Board for review and approval by the Executive Officer by **September 1, 1980. The** document should include the following elements:

   a. General location map sketch not larger than 8 1/2 x 11 inches.

   b. Written description of the project specifically describing the phasing and the construction time schedule.

c. Copies of any pertinent permits, or approvals that have been granted by any local, state, regional, or federal agencies.

d. Engineering and erosion control plans, specifications, and reports describing specific measures to be taken to prevent the discharge of waste earthen material and other construction wastes from the site during the construction and post-construction phases.

e. A time schedule for implementation of the erosion-siltation control plan.

2. An updated construction time schedule and erosion control plan with time schedule shall be submitted to the Board for review and approval by the Executive Officer by September 1 of every year thereafter for the life of the project.

3. The discharger shall comply with all sections of this Order immediately upon adoption.

4. The discharger shall comply with the Self-Monitoring Program as ordered by the Executive Officer.

5. The discharger shall immediately notify the Regional Board by telephone whenever an adverse water quality condition occurs as a result of construction related activities; written confirmation shall follow within 10 working days.

6. Any proposed material change in the character of the waste, method of disposal, increase of discharge, or location of discharge shall be reported to this Regional Board. This shall include all significant unmitigated soil disturbances and stream channel modifications.

7. The discharger shall permit the Regional Board or its authorized representatives:

a. Entry upon premises in which an effluent source is located or in which any required records are kept.

b. Access to copy any records required to be kept under terms and conditions of this Order.

c. Inspection of any monitoring equipment or method required by this Order.

d. Sampling of any discharge.

8. The discharger shall maintain a copy of this Order at the site so as to be available at all times to personnel responsible for construction and erosion control activities.

9. The Board will consider rescission of this Order upon demonstration that construction has been substantially completed, and that vegetation and other erosion controlling aspects of the project have become established to a point where erosion rates are comparable to those of similar established developments.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 5, 1980.

FRED H. DIERKER
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Marin Municipal Water District

Kent Lake Project (Peters Dam)

ORDER NO. 80-40

CONSISTS OF

PART A

Part A

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board.

2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

A. Receiving Water Sampling Stations

Station	Description
A-1	In Lagunitas Creek at the outlet of the siltation basin below the construction site. (If the only outlet is water filtering through the downstream toe, sample largest flowing stream.)
A-2	In Lagunitas Creek 100 feet upstream of the confluence with San Geronimo Creek.
A-3-N	A temporary sampling station shall be established for any surface water entering Lagunitas Creek below the silt retention basin, that has come in contact with construction activity.
C	In Kent Lake at point near the point of discharge.

B. Schedule for Sampling, Frequency and Analyses

The sampling analysis and frequency for sample collection is presented in Table I.

C. Reports to be Filed with the Regional Board

1. Violations of Requirements

In the event the discharger is unable to comply with the conditions of the waste discharge requirments and prohibitions due to:

(a) Maintenance work, failure of erosion and sedimentation control facilities, or

(b) Accidents caused by human error or negligence, or

(c) Other causes, such as acts of nature,

the discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

2. Self-Monitoring Reports

Written reports shall be filed with the Regional Board on the 1st and 15th of every month. The reports shall specifically cover each point in the monitoring program. Any violations shall be clearly identified, and actions taken or planned for correcting violations shall be included. Monitoring reports shall be signed by the District Manager or his duly authorized representative, if such representative is responsible for the overall operation of the project from which the discharge originates.

The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 80-40.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

Effective Date September 17, 1980

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

	Wet Season (3) Nov 1 - May 1				Dry Season (3) May 1 - Nov 1				
SAMPLING STATIONS	A-1	A-2	(4) A-3-N	C	A-1	A-2	C		
TYPE OF SAMPLES	Grab	Grab	Grab		Grab	Grab			
Flow Rate, cfs (est)	Daily	Daily	Daily		Weekly	Weekly			
Turbidity (1) JTU (5)	Daily at 10 am	Daily at 10 am	Daily at 10 am		Weekly	Weekly			
Settleable Solids (2) mg/l	Daily at 10 am		Daily at 10 am		Weekly				
pH, Standard Units		Daily		Daily		Weekly	Weekly		
Dissolved Oxygen, mg/l		Daily				Weekly			
Visual Observations - Lag. Cr. (6)	Daily	Daily			Daily				

NOTES:

(1) May be analyzed with periodically calibrated field equipment

(2) Measured with Imhoff cone in field

(3) Working day only

(4) When flow conditions occur

(5) If sample shows violation of requirements, a repeat sample is to be taken within 2 hours for verification purposes.

(6) During working days. Standard Observations

(a) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.

(b) Discoloration and turbidity: description of color, source, and size of affected area.